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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,529	08/11/2006	David Dakin lorwerth Wright	07588.0079	7480
	7590 05/06/200 IENDERSON, FARAE	9 BOW, GARRETT & DUNNER	EXAMINER	
LLP			MOULTON, ELIZABETH ROSE	
	901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			PAPER NUMBER
	.,		3767	
			MAIL DATE	DELIVERY MODE
			05/06/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date.		Application No.	Applicant(s)
ELIZABETH R. MACNEILL  3767  — The MAILING DATE of this communication appears on the cover sheet with the correspondence address — Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of mem ray be available under the provision of 37 CFR 1.7850, in an event, however, may a reply to terrely field  If NO period for reply is appelled above, the maximum statutory period will apply and will exple SIX (8) MONTHS from the maining date of this communication. Failur to reply within the set or extracted period for Provisional Pr		10/522,529	WRIGHT ET AL.
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A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.35(a). In no event, however, may a reply be timely filed after SX (5) MONTHS from the maining date of the communication.  - Extensions of time may be available under the provisions of 37 CFR 1.35(a). In no event, however, may a reply be timely filed after SX (5) MONTHS from the maining date of this communication.  - Extension of time may be available under the provisions of 37 CFR 1.35(a). In no event, however, may a reply be timely filed or this communication.  - Extension of time the set or extended period for reply will, by statute, cause the application to become ABANDONED (38 U.S.C, § 133). Any reply received by the Office fore than three monitary after the mailling date of this communication, even if timely filed, may reduce any searmed patent term adjustment. See 37 CFR 1.704(b).  - Status  1)  Responsive to communication(s) filed on 26 January 2005.  2a)  This action is FINAL.  2b)  This action is non-final.  3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4)  Claim(s)		ELIZABETH R. MACNEILL	3767
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Application/Control Number: 10/522,529

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#### **DETAILED ACTION**

## **Priority**

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

# Specification

The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-9, 15, 16, and 20-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Osman et al ((WO 00/72821, provided by applicant).

Osman et al teaches (FIG 2) a sclerosant agent foam made by combining polidcanol and oxygen or carbon dioxide gas through a micropore filter of 0.1 to 30 microns (see Pg 9 and example 3, starting at page 25). Osman shows the agent and gas are mixed (at 9/10) prior to passing through the foaming element (8).

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Osman's device is comprised of a housing (1); a first chamber (4), a second chamber (22, volume decreases as foil bag contracts) with sclerosant agent (3); an outlet (13) and a flow path (generally 10) comprising a mixing region (upstream of 11a/11b); and a foaming unit (8) with pores of 0.1-100 microns (Osman discloses 20 micron pores).

As to claims 2-9 and 15 see page 22 line 11-14. As to claims 20, 21 see example 3. As to claim 16, see page 10, line 11. As to claim 22, page 9, line 23. As to claim 23, see pg 7 line 23.

# Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 14 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osman et al

Claims 17-19: Osman teaches adding glycerol in an amount of 10% vol/vol (page 41 claim 62). This amount is selected based on the factors of increasing half-life of the foam and controlling the density of the foam (page 22 line 25-end). Applicant recognizes that the addition of glycerol has the same effects on the foam and evaluated different concentrations of glycerol (see table 16, page 95 and pages 93-95). The concentration of glycerol is clearly recognized as a result-effective variable by both the prior art and the applicant. Generally, differences in concentration or temperature will not support the

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patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a concentration of 20% vol/vol glycerol in order to achieve a desired half-life/foam density combination.

As to claim 14, it is well known in the art to provide a canister in a sterile bag for storage and shipping. The sterile bag would encompass the entire canister, and inside the sterile bag (now the housing) there would be first and second chambers as described above. It would have been obvious to one of ordinary skill in the art at the time the invention was made provide the system in a sterilized bag to prevent contamination before use.

3. Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osman et al in view of Gravagna et al (US 6,605,066)

Osman et al teaches (FIG 2) the foam dispenser as described above. Osman does not teach that the agent and gas are held in syringes with plungers.

Gravagna teaches a method of dispensing a foam comprising first and second syringes with plungers to adjust the volume of the syringes. The two foaming agents pass through a mixing chamber (7) before being dispensed as a foam. One syringe may hold a gas (Col 3 line 62). Since it is known in the art to provide a sclerosant and a gas is

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separate syringe barrels, and to combine them using a mixing chamber, it would have been obvious to substitute two syringe barrels for the two canisters of Osman.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the syringe dispenser of Gravagna to make the sclerosant foam of Osman since Gravagna's device is easily controlled and safe to use (Col 1-2).

As to claims 10 and 11, see Gravagna Fig 1, the motive power 4 pushes the syringe plungers. As to claims 12 and 13, see Gravagna Fig 3. The ratio of the volume of the first syringe is 3:1 to 10:1 the volume of the second syringe (Col 3 line 10-15).

#### Claim Objections

- 3. Claim 13 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 13 repeats the limitations of claim 12.
- 4. Claim 19 is objected to because of the following informalities: the claim should read that the viscosity agent is glycerol alone, not "is chosen from glycerol".

  Appropriate correction is required.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELIZABETH R. MOULTON whose telephone number is (571)272-9970. The examiner can normally be reached on 7:00-3:30 M-Th.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Sirmons can be reached on (571) 272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Elizabeth R MacNeill/ Examiner, Art Unit 3767

lui C. sumon